

STRATEGY STATEMENT

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Additional information on the attached can be obtained from Linda Crawford USAID/AFR/WA.

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USAID/Benin Strategy Statement

A. Program Rationale

1. Country Context: Benin, formerly known as Dahomey, was a French colony from 1902 until its independence in 1960. A military coup in 1972 brought Mathieu Kérékou to power upon which he proclaimed a "Marxist-Leninist" state and changed the country's name. Benin's experiment with Marxist-Leninism ended in 1989 when Benin was facing acute economic problems. President Kérékou was ousted in 1990 following a peaceful revolution and a National Conference that approved a transition to a multiparty democracy. Since then Benin has held three peaceful presidential elections. Prime Minister Nicéphore Soglo defeated Mr. Kérékou to become president in March 1991. The presidential elections of 1996 returned Mr. Kérékou to office, and he was reelected in March 2001 for his second and last term. The next presidential elections, scheduled for March 2006, will mark a watershed in Benin's political evolution. A constitutionally mandated age limit which prevents both President Kérékou and former President Soglo from running again has left the political field open to a change in regime.

During the past 15 years Benin has established a fundamental consensus on the key elements of democratic liberties and practices and put in place the major institutions for a democratic government. Municipal elections in 2002 were an important step in advancing the decentralization process which enables greater local participation in the nation's governance and development. Benin is a leader among African countries for freedom of expression. The active media in Benin disseminates a wide range of opinions and views in print and broadcast media. Radio call-in shows provide a venue for a diverse set of public voices. Benin's press freedom was recognized in the 2005 worldwide press freedom index published by Reporters without Borders in which Benin ranked 25 of 167 countries. This is a first-place ranking in all of Africa.

Benin's success in establishing a strong democratic foundation has been accompanied by generally sound economic policies over much of the past decade. These policies are a key factor in annual GDP growth rates averaging about five percent, a growth performance which is significantly superior to most African countries. A successful record in implementing sound macroeconomic and structural reforms enabled Benin to qualify for US \$460 million in debt relief under the Heavily Indebted Poor Countries Initiative (HIPC) in 2003, thus making available significant resources to pursue growth policies aimed at benefiting the poor. Benin was also one of 18 countries declared eligible for additional debt relief as part of agreements reached during a conference of G7 countries in February 2005. Benin has remained eligible to apply for funding from the Millennium Challenge Account since 2004.

Benin is a poor country facing formidable development challenges. It is a young country with a growing urban population. Nearly 45 percent of its 6.9 million inhabitants are under the age of 15. Over 44 percent of the population lives in urban areas, a rate that is nearly double that of twenty years ago. With a population growth rate of 3.2 percent, Benin's population is projected to be about 9.4 million by 2015, about half of whom will be living in urban areas. Benin's health and education status is among the lowest in the world. Life expectancy is 54. Adult literacy for age 15 and above is 33.6 percent. Per capita income is \$530 annually. An estimated 29 percent of the population lives below the national poverty line. Benin is placed at 161 out of 177 countries on the UNDP worldwide Human development index for 2005.

Benin also faces significant challenges to maintaining strong economic growth and ensuring that all of its people benefit. Encouraging private sector growth and investment is critical. Benin ranked 114 of 117 countries on the World Economic Forum 2004 growth competitive index. This measures a broad range of factors affecting an economy's business environment that are key determinants of sustained economic growth. For the World Bank 2004 "Ease of Doing Business" index, Benin ranked 129 of 155 countries. Benin's economic base must become more diversified and less tied to the "twin engines" of services and agriculture which together account for 85 percent of economic activity. Cotton

production is a mainstay of the economy. Cotton harvesting and processing contribute about 13 percent of GDP. It accounts for 40 percent of total export earnings. The livelihood of approximately 2 million people is tied to its production. In order to adequately meet the education and health needs of a growing population, Benin must also increase and diversify its sources of government revenues. Currently government revenue is highly dependent on earnings from cotton exports and customs, especially for goods received in port of Cotonou and re-exported to Nigeria by land. Benin must encourage the growth of the formal private sector and reduce the predominance of economic activity in the informal sector which currently occupies about 95 percent of the workforce.

In the past 2-3 years the outlook for Benin has become less optimistic. Low world prices for cotton, poor harvests (except for 2004) and the slow pace of implementing much needed reforms, particularly privatization of state-owned ginneries, have severely disrupted the cotton sector. In 2003 Nigeria decided to impose restrictions on third-country imports, some of which have since been lifted. These circumstances are often cited as reasons why Benin has experienced difficulties recently in meeting targets for revenues and public spending. Budget cuts in 2004 affected all ministries, though social programs in areas such as health and education were less affected. The budget deficit is expected to widen in the next two years. These economic constraints, budget cuts and deficits have enormous implications for Benin's continued ability to provide public services, especially in the areas of health and education.

The USAID program for Benin supports the goals and objectives for transformational development as set out in the Agency's White Paper and Strategic Framework for Africa. It also contributes to the U.S. Government's strategic objective to advance sustainable development and U.S. interests as defined in the State-USAID Joint Strategic Plan.

- 2. **Global Issues and Special Concerns:** The USAID program in Benin supports activities to improve the quality of basic education, improve the health status of the population, strengthen civil society, and protect women and children. Through its transformational development program, USAID addresses the following Agency-wide global issues and special concerns: HIV/AIDS, polio, malaria, family planning and reproductive health, and trafficking in persons.
- 3. Presidential and USAID Initiatives: The USAID program in Benin is linked to presidential and USAID initiatives in the following areas: the President's Emergency Plan for HIV/AIDS Relief; the President's Initiative on Malaria; the Presidential Africa Education Initiative; and the Women's Justice and Empowerment Initiative. Benin's national HIV infection rate is 2 percent according to 2003 estimates. While low compared to neighboring countries, it could rise rapidly due to high prevalence rates among certain high-risk groups. Benin is not a focus country under the President's HIV/AIDS initiative, but USAID funds are important to assist the government in preventing infection with HIV and other sexually transmitted infections, enabling access to voluntary counseling and testing services, and preventing mother-to-child transmission. Malaria is the leading cause of childhood deaths in Benin and is responsible for 40 percent of all health care consultations for children (twice as many as the next leading cause). USAID assists the Government of Benin to improve the quality of primary education in a program which emphasizes access to education, quality of teaching, girls' education, community participation in school management and HIV/AIDS. Africa Education Initiative resources improve teacher training and expand girls' access to education. Funds from the Women's Justice and Empowerment Initiative help break down legal and traditional barriers which have contributed to women's low social and economic status.

- 4. Links to National and Regional Development Priorities: USAID programs support Benin's development challenges and priorities outlined in key national planning documents including the National Poverty Reduction Strategy and the Education Sector Strategy. Benin is a member of major African regional organizations. One is the Economic Community of West African States (ECOWAS), a grouping of 15 anglophone, francophone and lusophone member states. Benin participates in ECOWAS initiatives connected to road transport, customs, energy and regional peacekeeping. As a member of the francophone West African Economic and Monetary Union (WAEMU), Benin participates in initiatives to harmonize macroeconomic and fiscal policies aimed at improving economic competitiveness within the region. Benin is also a member of the francophone Organization for the Harmonization of Business Law in Africa (OHADA) which brings together several Francophone African countries intending to update and harmonize business law. As in other countries, Benin's legal system is not well defined and consists of African traditional practices coexisting with French colonial laws as well as some more modern statutes. Benin's membership in the African Union and the New Partnership for Africa's Development (NEPAD) affirms a commitment to poverty reduction, good governance, integration into the global economy and cooperation among African states.
- 5. Millennium Challenge Account (MCA): Benin became eligible to apply for Millennium Challenge Account funds in May 2004 and plans to sign a US \$ 309 million compact in early 2006. The compact sets out a program to accelerate economic growth and poverty reduction by improving the volume and quality of investments in Benin. It focuses on land reform, access to credit and markets, and improving the business environment, particularly by addressing weaknesses within the judicial system. The USAID program focus on social services, civil society strengthening and strong governance complements the proposed MCA program.

B. Program Structure

The USAID program in Benin for FY 2006 through FY 2010 corresponds to the vision laid out in the USAID Strategic Framework for Africa. This vision is that Sub-Saharan African countries are democratic, on a sustainable growth path, reducing poverty and no longer dependent on foreign aid. The program supports the two operational goals under the transformational development framework:

- Foster a healthier, better educated and more productive population (Operational Goal #1)
- Increase the effectiveness of African institutions in promoting a vibrant private sector and democratic governance. (Operational Goal #2)

Activities of the USAID program are organized under two strategic objectives.

1. Ensure that a quality basic education is more widely available on an equitable and sustainable basis [Year of Initial Obligation 2006, Estimated Year of Final Obligation 2010]

This strategic objective directly supports Framework Operational Goals 1 and 2 through its education and democracy and governance objectives: (1) Increase access to education by marginalized populations; (2) Improve teaching and learning; (3) Build governmental, non-governmental and community capacity to promote, direct and organize education; and (4) Increase civil society's effectiveness in advancing reforms. It is associated with USAID program components: Achieve equitable access to quality basic education; Reduce transmission and impact of HIV/AIDS; Strengthen civil society; and Protect human rights.

Education is a critical sector for sustained economic growth, improved health (including fighting the spread of HIV/AIDS), and continued democratization. Immediately after the 1990 National Conference re-established democracy in Benin, the Government moved to reform its primary education system. The vision for education reform was to produce the citizens needed to manage Benin's developing democracy. The premise is that children would complete basic education equipped with fundamental knowledge and skills in key subject areas such as math and French, along with a capacity for critical

thinking and a sense of social responsibility. Under the education reform program net enrollment rates for boys increased from 65 percent in 1990 to 81percent in 2000. For girls the same figure rose from 32 percent in 1990 to 58 percent in 2000. With USAID support, the Ministry of Primary and Secondary Education has developed a new curriculum and introduced it into all public and private schools within the primary school system. Over the past six years the reformed curriculum was introduced into successive primary grades nationwide. The curriculum for grade six was introduced during the 2004-2005 school year.

There are still formidable challenges to improving basic education. The education reform effort has encountered resistance from parents and other stakeholders due to lack of understanding about the vision and intended results. The primary education system is not sufficiently equipped to serve the needs of a rapidly expanding school-age population which today numbers 1.3 million primary school age children, 560,000 of whom are girls. There is a shortage of classroom space. Benin closed its teacher training institutions during the 1990s, creating a growing shortage of trained teachers. Much of the gap has been filled with contract teachers, many of whom barely have a primary school education. Management within the education system is hampered by the government's lack of capacity to adequately plan and manage education resources. Closely connected to this is the lack of reliable, timely data to inform management decisions. A significant gender gap in primary school enrollment and completion persists despite noticeable improvements over the past decade. The fact that girls are much less likely to have completed primary school compared to boys is reflected in the youth illiteracy rates. While 30 percent of boys aged 15-24 are illiterate, nearly 70 percent of girls the same age are illiterate. The gender gap in education is closely tied to traditions which relegate women to a low status in Beninese society. More needs to be done to raise awareness about the contributions which women can make to development and about the importance of ensuring that women benefit fully from the legal rights accorded under the formal legal system. Similarly, practices which condone exploitation of children, use of child labor and trafficking in children must be addressed in order to open access to a primary education to all children. The education system must also be mobilized to address the potential threat of a rapidly expanding HIV/AIDS epidemic.

USAID's program assists Benin to improve the implementation of its primary education system so that quality of education and management within the education sector is improved. The Government is now moving forward with its plans to re-open teacher training institutions in six of Benin's 12 regions. Africa Education Initiative funds supplement other development assistance funds to provide technical assistance and training aimed at improving teachers' skills. USAID is providing technical assistance with designing curricula, preparing training modules and other priority tasks to assist the government as it reopens teacher training centers. USAID is continuing to fund in-service training for teachers along with training for school directors and inspectors aimed at improving their ability to provide adequate coaching and supervision to teachers. To promote accountability, USAID is helping to establish a monitoring and evaluation system of pedagogical activities at school and school district levels.

USAID support to developing a sector response to the HIV/AIDS pandemic includes helping the Ministry of Primary and Secondary Education to finalize and disseminate an HIV/AIDS policy for the sector. This includes integrating HIV/AIDS into the teacher training curriculum, making improvements as needed in life skills courses taught in schools, assisting the Ministry to be prepared to cope with issues related to HIV/AIDS in the workforce.

USAID is continuing a strong emphasis on promoting girls' education, protecting the rights of children and creating awareness of women's rights and their potential to contribute to the well-being of their families and the development of Benin. To promote girls' education USAID is building on successes of previous strategy which included working with the central government to establish appropriate policies to promote girls' education and at the community level to raise awareness and devise supportive interventions, such as peer-tutoring programs, which help girls succeed in school. Community level interventions afford an ideal opportunity to promote awareness of the rights of women and children.

To promote sound governance within the education system USAID is continuing an approach which combines policy dialogue at the central ministry level to encourage the government to make funds and

other resources available to communities to improve their schools and to establish systems for accountable management of information, personnel and other resources. Community-based interventions are an effective way to involve communities in setting priorities for education, advocating for resources, and ensuring that resources are used effectively. This includes ensuring that schools are well-managed and that school heads and teachers are fulfilling their responsibilities.

Anticipated results of the USAID program: As enrollment rates continue to rise, the quality of teaching and learning in the classroom will improve and more students will successfully complete the full primary cycle. The gap in enrollment and student achievement between boys and girls will continue to narrow. Community involvement in education planning and oversight of schools will continue to grow stronger. There will be continued improvement in the collaboration among representatives of local government, Ministry of Primary and Secondary Education and civil society in the management of schools. The Government of Benin will introduce policies to reduce the potential impact of HIV/AIDS on the teaching force and on school-aged children. The rights of women and their contribution to their families and development of the country will be better appreciated and protected. Children will be better protected against child trafficking and benefit from an education.

2. Expand the use of family health services, products and preventive measures within a supportive policy environment [Year of Initial Obligation 2006, Estimated Year of Final Obligation 2010]

This strategic objective directly supports Framework Operational Goals 1 and 2 and the following health and democracy and governance objectives: (1) Reduce transmission and impact of HIV/AIDS, (2) Prevent and control infectious diseases of major importance (TB and malaria), (3) Reduce child mortality, (4) Reduce maternal and newborn mortality, (5) Improve reproductive health and (6) Increase civil society's effectiveness in advancing reforms. The strategic objective is associated with the following USAID program components: Reduce transmission and impact of HIV/AIDS; Prevent and control infectious diseases of major importance; Improve child survival, health and nutrition; Improve maternal health and nutrition; Support family planning; and Strengthen civil society.

USAID launched its health program nearly a decade ago, at a time when the Ministry of Public Health was beginning to move from a traditionally highly-centralized bureaucracy to decentralized management. The Ministry faced formidable challenges to improve health status and health care. The utilization of public sector clinics was low and traditional healers provided much of the health care. Many health care workers were concentrated in the southern part of the country resulting in inadequate health care coverage in the northern regions. As a result the poor health status of the Beninese population was especially pronounced in these remote, disadvantaged areas. Nationally, maternal mortality was high at 498 deaths per 100,000 live births and the average Beninese woman would have between six and seven children in her lifetime. The infant and childhood mortality rates were 94 and 167 deaths per 1,000 live births respectively. Infants and children suffered greatly from preventable childhood illnesses, especially malaria and diarrhea.

USAID interventions over the past decade have led to increased use of modern family planning methods and other priority family health products, along with improvements in the delivery of health care services. Clients in USAID target zones in the north have benefited most directly from significant improvements in use of modern family planning methods and measures to improve the health of mothers and children under the age of five. The Ministry of Public Health has established a foundation for improved collaboration among representatives of local government, the Ministry of Public Health and civil society in the management of community family health services.

Benin continues to face challenges to improving family health. There have been marginal improvements in health status over the past decade. Infant and child mortality rates continue to be among the highest in coastal West Africa at 89 and 160 deaths per 100 live births. Maternal mortality is still unacceptably high. Although modern contraceptive use has more than doubled in the last 5 years, it is still under 10%. This is surprisingly low given that over one quarter of the women not using contraception either wants to delay their next pregnancy or not get pregnant again. Although a large percentage of pregnant Beninese

women have pre-natal consultations and give birth in a private or public health establishment, access to emergency obstetrical and neo-natal care, including the prevention of post-partum hemorrhage, remains low. The national HIV infection rate of 2 percent is low compared to neighboring countries, but there is a risk of further spread among the general population due to high prevalence rates among certain high-risk groups. Decentralization has not moved forward as rapidly as expected and more needs to be done to involve communities in planning and oversight of health services. Weaknesses in management and delivery of health services persist. Health workers need to continue developing skills. The Ministry of Public Health needs to improve its management of family health commodities in order to address problems with stock outs in certain parts of the country.

Building on the successes in USAID concentration zones achieved under the previous strategy, while addressing the continued need for expanding family health services, is at the core of the new USAID health strategic objective. USAID intends to increase the use of services, products, and preventive measures while extending the geographical scope of its projects. A supportive environment refers to the need to ensure that adequate policies, management systems, trained personnel and community participation and oversight are in place. It also refers to the importance of establishing behavior change communications aimed at creating a favorable socio-cultural context. USAID activities under the new strategy will result in increased access to family health services, especially among poorer and underserved groups, as well as an improvement in the quality of management and services.

USAID's health interventions continue to focus on the delivery of integrated, quality family health services and ensuring that these are available at all service delivery points. The minimum package of services consists of family planning, pre-natal care, assisted delivery, integrated management of childhood illnesses (IMCI), post-natal care, emergency obstetrical and neonatal care, curative care, testing and management of sexually transmitted infectious and HIV/AIDS, vaccinations, growth monitoring and information, education, and communications to raise awareness about health issues and bring about changes in behavior. USAID is working with the Ministry of Public Health and other donors to develop a contraceptive commodities security policy and program to ensure that health providers in the private and public sectors are more effectively managing contraceptives. USAID continues support to establish and expand community health insurance schemes and encourage community participation and oversight in health services. USAID also supports income-generating activities in connection with this in order to assure continued access to health services. USAID provides continued technical assistance to support the transfer of authority and financial resources to decentralized operational units within the Ministry of Public Health. USAID continues to support social marketing to ensure the availability of subsidized family health products such as condoms. contraceptives and oral rehydration salts through the private commercial distribution network. USAID is also exploring ways to expand the network of private practitioners providing quality, accessible family health products and services through the existing social franchising mechanism. Private sector practitioners will also be included in IMCI training.

Given the devastating impact of malaria on children and the importance given to this by the Ministry of Public Health, USAID is continuing to give it priority by scaling up best practices in malaria control developed under its previous strategy. Malaria activities are an integral part of the IMCI activities. The new strategy will also support the Ministry of Public Health's improved antenatal package that includes intermittent preventive treatment and subsidized insecticide-treated bednets for pregnant women to reduce the incidence of low birth weight and severe maternal anaemia. In accordance with the new malaria earmarking guidelines, USAID/Benin plans to work closely with the Ministry of Public Health to encourage efficient and equitable management of the commodities that will be purchased. To leverage additional support for Malaria control, USAID/Benin will provide periodic support to the National Malaria Control Program through the Country Coordinating Mechanism secretariat to develop proposals for each submission round to the Global Fund for AIDS, Tuberculosis and Malaria.

To combat the spread of HIV/AIDS, USAID serves the needs of women of reproductive age by integrating HIV/AIDS information and voluntary counseling and testing with family planning and other health services. USAID funds targeted behavior change campaigns, including "ABC" (Abstinence, Be faithful, and Consistent use of condoms). USAID provides technical assistance to the National AIDS

Control Program and the National AIDS Control Council to improve the strategic management and coordination of Benin's fight against HIV/AIDS. Through the Country Coordinating Mechanism secretariat, USAID also provides periodic assistance to the Ministry of Public Health to develop proposals for submission to the Global Fund for AIDS, Tuberculosis and Malaria.

All interventions under the USAID family health program are designed to appropriately address the needs and interests of a broad array of clients. These include children and infants, adolescents who have not yet become sexually active; young married adolescent mothers, older women of reproductive age, along with husbands and partners.

Major activities related to improving governance in the sector include continuation of the Mission's support to Benin's decentralization policy by strengthening the health system at the health zone, health center, and health management committee levels. Grassroots civil society organizations, such as local NGOs which have been past beneficiaries of USAID civil society strengthening programs along with other community-based organizations and women's groups, are receiving assistance to strengthen their capacity to identify priority health issues, devise appropriate solutions, advocate for behaviour change and demand accountable management within the health system.

Although the 2004 budget crisis resulted in a reduction in the health budget, the 2006 health budget has increased by over \$4 million from its 2005 level from \$94 to \$98 million. In addition to the donors providing project support for health, a number of donors in Benin are providing direct budget support in the health sector. This will help ensure that adequate resources will be available to meet the country's health needs. Benin is also receiving support for specific intervention areas such as HIV/AIDS, malaria and tuberculosis through the Global Fund for AIDS, Tuberculosis and Malaria and the World Bank through its Booster Program to control Malaria.

Anticipated results of the USAID program: More people will have access to a minimum package of family health care services to protect the health of mothers, children and sexually active adults and adolescents. More people will take appropriate actions to protect their own health as well as the health of their children. More people will adopt safer sexual practices to protect themselves from infection with HIV/AIDS and other sexually transmitted infections. Communities will be more assured of having financial access to health services and will effectively contribute to oversight of planning, implementation, monitoring and evaluation of health services. The Ministry of Public Health will increase its ability to provide adequate health care to the people of Benin through continued improvements in capacity to plan, budget, train and supervise staff. There will be continued improvement in the collaboration among representatives of local government, Ministry of Public Health and civil society in the planning and management of local health services.

C. Risk Factors for Vulnerability or Backsliding into Fragility

The factors which could impact Benin's ability to move toward sustainable growth are the following:

1. Government Management: With the fiscal deficit expected to rise to 5.5 percent of GDP in 2005 and to 5.8 percent in 2006, Benin must vigorously pursue reforms aimed at diversification of the economy and increasing revenue. The Government must implement necessary reforms in the cotton sector, especially plans for privatization. The Government must also move forward with reforms which will have a significant impact on the ability to effectively deliver public services. This includes taking strong measures to curb corruption and implement reforms of the civil service and management of public expenditures. These are necessary in order for the government's continued ability to meet its poverty reduction targets under the National Poverty Reduction Strategy. Budget support from the World Bank and other donors supports the government's efforts to put in place reforms to improve governance, enhance private sector development, improve the business environment, and ameliorate public service delivery.

- 2. Poverty: Over the past decade poverty has been deepening rather than lessening. The proportion of people living below the national poverty line increased from 26.5 percent in 1995 to 29 percent in 2002. There is a strong perception that benefits of economic growth are not widely shared and indications that the Beninese could become increasingly disappointed with the government's ability to deliver on promises made to the people when Benin launched its democratic government in 1990. According to results of the 2005 AfroBarometer survey, 90 percent of respondents agree that government policies benefit a minority while 80 percent believe that the gap between the rich and poor is growing. Barely half of the respondents expressed satisfaction with the way democracy works in Benin.
- 3. Volatility within the region and in Benin: Benin's location between two politically fragile states, Togo to the west and Nigeria to the east, places it in a situation where it is easily affected by adverse political or economic conditions. For example the violence in the aftermath of Togo's 2005 presidential elections led to an influx of nearly 25,000 refugees. Benin participates in regional peacekeeping efforts and has sent troops to regional hot spots such as Cote d'Ivoire. Increases in basic prices for food and oil have been cited as contributing to an increase in violent crime.
- 4. Anti-Corruption and Support for Decentralization: Benin's chief challenge to further economic growth and evolution of its democratic system is to counterbalance a strong tradition of centralized authority. There is a lack of effective checks and balances to counter the power of the state, especially the executive, which exerts a strong influence over much of the country's economic and political activity. This is a main contributing factor to the problem of endemic corruption and the resulting instances of grand corruption at the central level. However, corruption is able to flourish in Benin because of cultural norms which accept corruption as a regular part of doing business. Until the attitudes which enable corruption to flourish are addressed, it will be difficult for an ethic of sound, accountable management of government resources to take root. To address this USAID includes a strong emphasis on decentralization and civil society in its program. Involving civil society in local initiatives is a way to increase the demand for accountable government and also to ensure that community priorities are addressed in local development initiatives, and that planning and implementation is conducted transparently and accountably.

D. Key Issues

- 1. Extractive Industry: Extractive industry plays a minor role in Benin's economy and mineral deposits remain largely unexploited. Benin has deposits of gold, iron ore, brick and china clay, feldspar, and phosphate and has awarded several exploration licenses for gold exploration in the country to foreign investors. Benin is dependent on refined petroleum products imported from neighboring Nigeria. Imported oil-derived products supply the large majority of the country's commercial energy needs. Benin is one of the countries involved in the planned West African gas pipeline running from Nigeria to Cote d'Ivoire. There has been limited foreign investment in mining to date. This has been attributed to lack of adequate infrastructure for roads and electricity. This could change due to recent investments to improve infrastructure.
- 2. Counter-Terrorism: Benin supports the U.S.-led global campaign against terrorism and has signed all 12 United Nations anti-terrorism conventions. As an Organization of Islamic Conference (OIC) member-country whose population is 20 percent Muslim, Benin is a positive role model for religious tolerance. With the trend for Islamic extremists to become active in West Africa and Benin's proximity to Nigeria where the influence of political Islam is spreading, and a large Lebanese community in country, there is a need to monitor the situation in Benin. The Embassy maintains an outreach program with the Muslim community and ensures that a portion of its self-help and democracy and human rights (DHR) projects directly benefit the Muslim community. USAID support for poverty reduction programs aimed at improving the reach of critical social sector services and encouraging constructive community engagement in identifying needs and overseeing the quality of services together with the MCC program focus on economic growth will help to address some of the root causes by which poor communities become fertile ground for activities of extremist groups.

E. Cross-cutting Themes

USAID programs in Benin address the following cross-cutting themes:

- 1. Gender: Abundant research points to the social and economic status of women as a key factor in poverty reduction. Yet in Benin the universal oppression of women is a persistent and difficult problem. Women especially have been denied the benefits of economic and political progress during the past decade. Their participation in public life is inhibited by oppression based on harmful beliefs about the appropriate roles and limited talents accorded to women. They do not have the necessary economic means or sufficient institutional support to ensure their right to self-determination. Women do not have strong involvement in making significant household decisions. There is also a high tolerance for physical abuse of women, including domestic violence. Fear of sexual abuse and low return on the investment are frequently cited reasons why families are reluctant to send girls to secondary school. Despite major gains in access to education over the past decade, there continues to be a significant gap between boys and girls educational accomplishments. Women's illiteracy rates are high. USAID has included a strong gender component in both of its strategic objective programs to address gender equity issues.
- 2. HIV/AIDS: The national HIV infection rate of 2 percent (according to 2003 estimates) is low compared to neighboring countries. Nevertheless high prevalence among certain risk groups and high risk behavior among the general population poses the threat of further spread. Benin has been successful in mobilizing external resources for its HIV/AIDS program but still faces a number of challenges such as complacency, weak institutional leadership and coordination of the fight against HIV/AIDS, ineffective decentralization of AIDS control activities, and wide-spread stigma against people living with HIV/AIDS. USAID is addressing HIV/AIDS in its health and education programs.
- 3. Youth: About 25 percent of Benin's total 6.9 million population is between 15 and 24 years of age. The needs of youth will be addressed across the USAID program. While adolescents are a minority group in the primary school population, their needs and interests must be addressed, particularly as they become sexually active and are at risk of HIV/AIDS and other sexually transmitted infections. Youth issues will also be addressed in the health program, along with the dangers associated with early sexual debut, early marriage and pregnancy. Where this is appropriate, all partners will be required to disaggregate performance management data to show how youth benefit from program activities.
- 4. **Urbanization:** The proposed USAID program does not have a specific urban focus, although activities to support decentralization will be located in some urban and peri-urban areas. There are other donor programs, especially those of the World Bank and European Union, which are broad and have a strong urban focus. This includes problems encountered in providing services in primary and secondary cities of Benin, such as water and sanitation, roads, markets, and health centers.

E. Regional Aspects

USAID/Benin continues a successful collaboration with the West Africa Regional Program (WARP) in health for activity design and other issues. This ensures that the Benin program will benefit from successful models and experiences throughout the West Africa region in programs for HIV/AIDS, family planning, malaria and integrated management of childhood illnesses. Collaboration with WARP will also continue in the areas of trade promotion, economic growth and environment to include Benin where appropriate. Benin will provide limited support to the implementation of the West Africa Cotton Improvement program which will be implemented by WARP.

F. Donor Coordination, Public-Private Partnerships, and Indigenous Expertise

USAID works closely with other donors and US government agencies implementing programs in Benin. The USAID Director and the U.S. Ambassador participate in a senior donor coordination group which

meets monthly to share views and develop a common position on key issues to bring to the attention of the government. USAID is the lead donor in the education sector and has worked with other donors to engage the Ministry of Primary and Secondary Education in discussions of key issues. Under USAID's leadership, other donors including Denmark, France, and the Netherlands are significantly increasing their assistance to the education sector. USAID also participates in donor working groups constituted around the themes/sectors of health, private sector, decentralization, elections, and anti-corruption. While many donors now provide budget support, USAID has been able to complement other donor programs or leverage additional donor resources in various aspects of its program. USAID's health program will reinforce the World Bank MAP activity to foster a cross-sectoral approach to fight the spread of HIV/AIDS. It also complements the Swiss program to support the health zones. KfW contributes condoms to USAID's social marketing program for HIV/AIDS prevention and hormonal contraceptives for family planning. USAID collaborates with UNICEF on education and combating child trafficking.

USAID is not presently engaged in any private sector partnerships, but will explore options through WARP and include language in solicitations as appropriate to encourage partnerships with private sector entities.

Contribution and participation from local experts and organizations along with contributions from local communities in development programs is an important focus across the USAID program. Partnerships with local community organizations are strongly encouraged and local experts participate in many of the special studies, analyses and activity designs commissioned by USAID.

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US Geological Service, 2004 Report on Mineral Industries of Benin, Burkina Faso, and Sao Tome e Principe

Annex

USAID/Benin FAA 118/119 Environmental Analysis

USAID Benin: Initial Biodiversity and Natural Forest Conservation Assessment for Current Strategic Planning – December 2005

Overview

This report represents the first part of a two step process aimed at completing a full environmental assessment for USAID Benin. The current report provides a preliminary summary of the status of Benin's biodiversity and natural forest resources, including principle threats. It also contains a brief analysis of how current Mission programs in the new strategic plan could address some of these threats. The second part of this study will involve a comprehensive analysis of the sector and will include interviews and field work. That work will build on this report and will be completed during the fist six months of 2006.

Much of the information used for this report was taken from, "Strategie Nationale et Plan d'Action pour la conservation de la Diversite Biologique du Benin" which was completed in 2002. The document is very useful, but some of the information is incomplete or vague; other information is missing all together (including the status of amphibians and butterflies – both groups recognized as key indicators of habitat health). These shortcomings should be taken into consideration when completing the second part of this study.

In addition to the summary, this report is divided into three sections:

- 1. Background (contains basic biophysical and socio-economic information);
- 2. Forest and Biodiversity Conservation, including threats;
- 3. USAID Benin

Summary

Benin contains key pockets of biodiversity and a limited number of important forest types; however, its importance as a haven for biodiverse areas and natural forests is less than most of its regional neighbors because of two key factors. First, the most biodiverse terrestrial ecosystems are the humid tropical forests, and Benin contains very few of those forest types. Second, the most biodiverse marine ecosystems are the coral reefs; again, Benin (as well as the rest of the West African states) is lacking that key ecosystem. The humid forest zone, which runs from Guinea to Cameroon, is missing in Benin due to a regional climatic feature known as the "Dahomey Gap." Cold water currents in the Gulf of Guinea (from central Ghana, east to Nigeria) which reduce the levels of evaporation along the coast, and a general slope that runs northeast to southwest (and captures less moist air arriving from the east) combine to create a "Sahelian" type climate along the coast. In this "gap" rainfall averages about 800 mm/year. Dense tropical forests need a minimum of 1500 mm/year to thrive. As a result, most of the coastal vegetation associated with the Dahomey Gap is savannah-like, and only about 2 percent of Benin is covered by dense forests (in the south). These forests are also associated with some of the more fertile soils, and as a result they are located in areas of high population densities. Other threats to biodiverse areas includes cotton production zones (central and northern Benin) from land conversion and pesticide use, energy demands for fuelwood (including charcoal), a high population growth rate (3.2 percent), low literacy rates and low income levels. Current biodiversity inventories are far from complete; the lack of good baseline information is noted as a major constraint to developing sound conservation strategies. USAID Benin has not targeted biodiverse or natural forest areas for specific activities under their health, education and governance programs.

I. Background

Benin is located between latitudes, 6 degrees, 30 minutes north and 12 degrees, 30 minutes north, and longitudes 1 degree east, and 3 degrees, 40 minutes east. The western border is shared with Togo, the northwestern border with Burkina Faso, the northeastern border with Niger, and the western border with Nigeria. To the south, Benin adjoins the Gulf of Guinea along a 125 kilometer coastline.

Benin sits on the West African craton or shield, a geological feature characterized by precambrian parent basement rock (from 4.5 billion to .5 billion years old) with more recent sedimentary layers. Within Benin there are four distinct zones that include: 1) Mountainous region (associated with the Atakora mountain range) located in the northwest Benin – the range that runs northwest by southeast and continues into Togo and Ghana. This area is the main watershed for Benin, and it is the source for the Oueme, Pendjari and Mekrou rivers; 2) The Coastal zone, which is a relatively narrow strip of land that contains all of the lagoons and some of the most important lakes in Benin; 3) The Plateau region made up of clay and sand deposits that is found just north of the coastal zone and continues about 100 kilometers inland; and 4) The peneplain of Benin (large plateau) that increases in elevation very slowly from south to north. Elevation ranges from 0 to 800 meters except in the Atakora mountains and a few other areas.

Benin's soils are highly variable, but in general there are 5 major soil types that include:

1) Ultisols (also known as Ferrisols or Luvisols), among the most common soils found in the tropics (and in Benin – represents about 80 percent of the country's soils), which are heavily weathered, low in nutrients and not optimal for agriculture; 2) "Terre de Barre" (Alfisols) that are good agricultural soils found on the southern plateau - although this soil group covers about 5 percent of the country, almost half of Benin's population reside there; 3) Fluvisols, deposits found in valleys and plains (5 percent); 4) Vertisols (black cotton soils) that are relatively fertile but difficult to manage/work because of their "swelling and shrinking" nature (5 percent); and 5) Sandy mineral soils of the coastal area which are low in fertility (5 percent).

In all, Benin is covered by about 333km2 of lakes and lagoons. The river system is extensive and in total is 3050 kilometers long. The network of rivers forms the boundaries of a number of ecosystems, and their associated riverine forests enhance levels of biodiversity. Benin has three climatic zones. The southern zone has an average rainfall of 900-1500 mm/year; it is humid and has four seasons (two wet, two dry). This zone contains the best soils, vegetative growth and the highest levels of biodiversity. The central zone has similar annual rainfall level but only two seasons. The central zone also is known for larger temperature fluctuations than the southern zone. Finally, the northern zone is the driest and averages 900 mm/year with two seasons. The northern zone has the highest evapotranspiration deficit.

Benin has six main vegetation zones largely derived from the climate and the soils. They include: the coastal zone, which contain grasses and some intermittent forest areas, the swamp forests of southern Benin, the dense humid forest associated with the southern plateau and located between the coastal zone and the inner plateau region (these forests are highly fragmented with well conserved pockets), the dry forest transition zone, which contains some of the more valuable timber species (*Khaya sp.*, *Pterocarpus sp.*, *Afzelia africana*, *Diospyros sp.*), the riverine forests, and the wooded savannah.

The population of Benin is estimated at about 6.9 million people. More than half of the population live in the southern part of the country, which represents only about 10 percent of the total land area. As in many West African countries, a large percentage of the population is young; 45 percent of Benin's population is 15 years old or younger. The average population growth rate is a relatively high 3.2 percent. Illiteracy rates are also high, at about 70 percent. There are three major religious groups in Benin: Christianity (about 36 percent), Animism (35 percent) and Islam (20 percent).

Benin has been liberalizing its economy and actively pursuing democratic political reform during the past 15 years; this reform also includes a recently launched national decentralization program. Benin has also undertaken a nation poverty reduction strategy. Despite Benin's reform efforts, it still remains a very impoverished nation. It ranks 131 out of 174 countries in terms of average annual income per capita. About two-thirds of the population is located in rural areas, and some of these groups suffer regularly from food insecurity. These areas are also where population pressure is high on biodiversity.

In 1991 Benin initiated a National Environmental Action Plan process that was designed to critically review all sectors in relation to the environment and the management of natural resources. The Environmental Action Plan was completed and written into law in 1993. Concurrently, Benin participated in the 1992 International Conference that developed the "Convention on Biodiversity (CBD)" (held at Rio

de Janeiro), and Benin is a signatory to the convention. This was completed by June 30, 1994. A directive of the CBD is for each signatory country to develop a national strategy and action plan to conserve biodiversity through an iterative and participatory process. Benin began this process in 2000 and completed the "National Strategy and Action Plan for the Conservation of Biodiversity" by March 2002. In addition to the CBD, Benin is a signatory to the Cartagena Protocol on Biosafety, the Climate Change Convention and the Convention for the Fight against Draught and Desertification. Benin is also a signatory to the Ramsar Convention (conservation of wetlands) and the Bonn Convention (to protect migratory species). A stated objective of Benin's National Development Strategy is to fight environmental degradation and guarantee the protection of Benin's biodiversity resources. In this regard, the issue of sustainability is clearly a guiding principle, where the country will strive to achieve a balance between consumption and replenishment levels.

II. Forest and Biodiversity Conservation, including threats.

Forested Areas

Benin contains about 26,500 km2 of forest area¹, with about 98 percent of this being natural forest and the rest plantations. Forests cover about 24 percent of the total land area in Benin. Within the 24 percent however, the overwhelming majority of forest cover has a crown closure of less than 50% (i.e., the ground area covered by tree crowns is less than 50 percent). This means that most of Benin's remaining forests are either sparsely stocked dry forests or wooded savannas. Only 2 percent of Benin is covered by a closed canopy forest where the tree crowns cover 75 percent or more of the ground area (typically associated with dense humid forests or deciduous forests found in the southern part of Benin). These are also the forests that harbor the highest levels of biodiversity.

The largest of the closed canopy forests is the Classified Forest of Lama, which covers an area of only 1900 hectares. In the same region there are numerous forest fragments that range in size from a few hectares to as much as 100 hectares or more; many of these are sacred/traditional forests. Some of the key tree species found in these forests include *Cieba pentadra* (Kaopok or cotton tree), *Triplochyton scleroxylon*, *Chlorophora excelsa* (iroko), *Terminalia superba*, *Holoptelea grandis and Piptadeniastrum africanum*. Wildlife associated with these forests includes a number of rare and threatened species including, the red-fronted monkey (*Cercopithicus erythrogaster*), the Mona monkey (*Cercopithicus mona*), the "magistrate" colobus (*Colobus vellerosus*), the olive colobus (*Collobus verus*). It is believed that the red-fronted monkey could be endemic to Benin; unfortunately, it is also seriously threatened and limited to the Lama forest and Oueme Valley. Other wildlife species found in these forests include the blue duiker (Cephalophus monticola), the tree hyrax (Dendrohyrax aboreus), the Seba python (Python sebae), black and green mambas (Dendroaspis spp.), guinea fowl (Guttera edouardii), civit cats, mongoose, and servals.

The dry forests and open forest (woodlands) are found to the north of the closed canopy forests and represent a transition zone between the coastal region and the savannah. This area also contains a number of riverine forests which are locally important refuges for biodiversity. The predominant dry forest tree components include two species of the genus Isoberlinia as well as the commercially important Afzelia africanan (lingue), Khaya senegalensis (mahogany), and Pterocarpus erinaceus (dark brown wood used for furniture and wood carvings). The riverine tree species include *Beerlinia grandiflora*, *Parinari congensis, Detarium senegalense, Diospyros mespiliformis, Dialium guineense, Khaya grandiflora and K. senegalensis* (both mahoganies), *Millettia thongenii*, and *Erythrophleum sauveolens*. The wildlife species found in the dry and riverine forest types are essentially the ones associated with savannah areas. Species include the several large antelope species (Roan antelope, hartebeest, Defassa's cob), bushpig, buffalo, vervet monkeys, and several reptile species. These are forests that are threatened each year by wildfire.

¹ Forests, as defined by the FAO, is a piece of land in excess of 5 hectares that has tree crown cover in excess of 10%.

The wooded savannah is the largest of the forest cover types. While the number of tree species is relatively few, and dominated by two genera of the Combretum family (*Terminalia sp.* and *Combretum sp.*) and occasional baobabs (*Andansonia digitata*), these forests contain the richest diversity of medium to large mammals, including lion, leopard, hyena, cheetah, elephants, as well as the species listed above for the dry and riverine forests. Birdlife is especially rich in the savannah zone as well, and includes species such as the crowned crane, marabou stork, ground hornbill, eagles, canaries, and others.

There are two other forest types that are mainly found in the south, the swamp forests and the mangroves. Swamp forests are imbedded in a mosaic of different vegetation types which include both moist and inundated grasslands, papyrus swamps, and other zones. The dominant tree species are *Mitragyna inermis, Cola laurifolia* and Raphia palm. Swamp forests are rich in fish and crustacean species, and they are key habitat for migratory birds. Other species found in the swamp forests include the "water antelope", the sitatunga (*Tragelaphus spekei*), the African clawless otter (*Aonyx capensis*), the spotted necked otter (*Lutra maculicollis*), monitor lizards (*Varanus niloticus*) and the crocodile. Mangroves cover about 6900 hectares and are dominated by two tree species: *Rhizophora racemosa* and *Avicennia germinans*. Wildlife associated with mangroves include fish and crustaceans (breeding and feeding grounds for both), reptiles, birds and the mona monkey.

Deforestation rates in Benin from 1990 through 2000 are alarmingly high. During that decade it is estimated that the total natural forest area was reduced by 22 percent. The main reasons for deforestation are clearing for agriculture, overgrazing naturally regenerating areas, seasonal burning (especially threatening to dry forests and wooded savannah), and the overexploitation of wood fuel as an energy source – more than 90 percent of the population depend on fuel wood and charcoal for their domestic energy needs. In relation to agricultural expansion, the combination of low soil fertility and repeated wildfires increases the pressure to convert remaining forest lands.

Within the different forest types there is a considerable demand for certain forest species that provide both subsistence and commercial benefits (non-timber forest products like ropes, resins, medicinals, mushrooms, etc.). The consumption rates and methods are generally not well monitored, and some of these species are becoming rare in select locations. In cotton growing zones, natural systems are threatened by the misuse of pesticides. Seasonal livestock herding is a major threat to protected areas, especially in the northern regions. Natural regeneration is trampled and over browsed, which puts domestic herds in direct competition with the native wildlife for the same resource.

Poaching (for household consumption or the bush meat trade) is also a serious threat to biodiversity throughout the country. West Africa has the highest bush meat consumption levels on the continent. Fortunately, certain species in specific locales also have cultural and traditional value. They are often found in sanctuaries and are protected by residents. Other species have disappeared entirely. A few of the more noteworthy include the rhinoceros (*Rhinoceros bicornis*), and the Bongo (*Tragelaphus eurycerus*), which was last seen in the forest of Mount Kouffo in the 1970s. Other mammals that are listed as threatened or rare include: the olive colobus monkey, the magistrate colobus, the cheetah, the leopard, hunting dogs, topi, the tree hyrax, the dugong, and the giant pangolin. In addition to poaching, habitat destruction is a major threat to biodiversity; this is especially true in the classified forest areas where wildlife protection is weak or non-existent.

Non-forest Zones

Highlands include the Atacora mountain range as well as the inselbergs (large and conspicuous rock outcroppings) found throughout the northern parts of Benin. Vegetation includes *Afrotrilepsis pilosa* and *Hymenodictyon floribundum*. Mammals found in these areas include the rock hyrax, baboons, patas and vervet monkeys, rabbits and rodents. Several species of bats are also found around the inselbergs.

Ocean diversity is associated with the continental shelf, which covers an area of about 3000km2 off the coast of Benin. Marine fish species number about 450. Marine algae numbers about 123 species. Fish and crustaceans are heavily exploited both by artisanal and industrial means. Giant sea turtles also use the beaches of Benin for nesting. In the coastal areas vegetation is dominated by palms and grasses such as *Remirea maritima*, *Impomoea pes-caprae* and *Chrysobalanus icaco*. These areas are also the

home to shore birds and crustaceans (mostly crabs). Coastal zones and waterways are threatened by pollution and sedimentation buildup.

Freshwater systems contain high levels of biodiversity. Large mammals include the hippopotamus (*Hippopotamus amphibious*) and the West African manatee (*Trychecus senegalensis*), both of which are found in internal waterways. These areas are also the home to the Nile Crocodile (*Crocodylus niloticus*). The main river basins are the Oueme, Couffo, Mono, Volta and Niger. The Oueme is the largest in Benin and contains a total of 110 aquatic species. Threats to freshwater systems include pesticide use for agriculture (especially in the Borgou and Zou regions); overfishing and destructive fishing techniques, destruction of aquatic species breeding grounds, dam construction/change in river bed and flood areas, and deforestation of the waters edge and side slopes of lakes and lagoons.

Summary of status and threats of different groups

Insects and other invertebrates. The study of Benin's insects is a work in progress (like most other groups). To date national insect collections are housed in several organizations and include 2592 species. As would be expected, much of the collecting has been made in relation to species that could be a threat to food crops. This is also the reason why insects receive a fair amount of attention compared to other taxonomic groups. Apart from agricultural pests, insects associated with natural ecosystems are not well studied (e.g., forest insects, wetland insects, etc.). An unknown number of insect species have disappeared after repeated wide spread application of pesticides during the establishment and management of agricultural industries.

<u>Fresh water fish and crustaceans</u>: In all, there are about 180 species, which include: 58 species found in the coastal lagoons; 68 species found in Lake Nokoué; 72 species found in the lagoon of Porto Novo; 52 species found in Lake Ahémé; 22 species in the Toho lagoon; 60 species found in the Ouémé River; 30 species found in the Niger River. These species are overexploited in all locations: The use of illegal fish nets is the leading cause for the rapid depletion of existing stocks. Other threatening factors include, pollution from pesticides, industrial water discharge, discharge of petroleum products, invasive plants (e.g., water hyacinth), poisons illegally used for fishing, and non-enforcement of seasonal limits on activities.

Marine life: As noted above, there are about 450 species of marine fish for Benin. Of these, about 260 are exploited commercially and a select few are vital to resident fishing communities. Some (about 77) also have value for the sport fishing trade. There are roughly 3,000 artisanal fishermen who depend on marine fish stocks and about 20 local commercial fishermen. It is generally recognized that foreign fishing vessels are severely depleting marine fish stocks in West Africa (especially off the coast of Ghana). While it is assumed that this is also a problem for Benin, there is little available information at this time. Invertebrate species are estimated in the hundreds of thousands but poorly studied. A number are economically important. Algae and phytoplankton are also not well studied.

Reptiles. Reptiles are not well studied in Benin. At this time it is believed that there are about 66 species of snakes, 5 species of lizards (2 of which are monitors), 2 species of chameleons, 2 species of crocodiles and 7 species of turtles (5 of which are marine). While most reptiles are eaten by local residents, the greatest threat to reptiles comes from their commercial exploitation for exportation to European markets. Individual animals and their eggs are collected for the pet and zoo trade. In addition to reductions in local species diversity, this is having a noticeable impact on agricultural production systems as many of the rodent populations that cause damage to food crops are expanding due to the decreasing numbers of their main predators, reptiles. Limits on the quantity of reptiles exported are not respected and many leave Benin illegally through the border with Togo where they are then shipped to Europe.

<u>Birds</u>. Limited systematic inventory work has confirmed that there are 371 species of birds in Benin, but future estimates could place this figure as high as 600. Within that group there are: 250 species found in the national parks; 227 species in central Benin; 100 in the Lama forest and 185 in the area of Lake Nokué. A number of species (including the francolins and guinea fowl) are highly regarded by the local population for food. There is also a relatively small but growing ecotourism industry centered around bird viewing. The main threat to Benin's avifauna comes from habitat destruction, including the felling of

dominant forest trees that contain the nests of many species, and the pollution of waterways with toxic substances.

Other groups.

It is worth noting other groups that play important roles in the livelihoods of Benin's population. Benin appears to be exceptionally rich in fungal species, including mushrooms. To date, about 250 mushroom species have been described for Benin; some play an important role in rural areas. There are at least a dozen species that have had commercial commodity chains developed through the work of NGOs. Women are the target group since they have traditionally collected and handled mushrooms. Some mushrooms also contain medicinal properties. Others are critical to the viability of certain ecosystems given their symbiotic relations (mycorhiza) with a number of higher plants. Threats to the known and valuable mushrooms mostly come from habitat destruction (removal of host plants) and mineral fertilizers, which can make soils unfavorable for mushroom production.

Natural grasslands are found throughout Benin, even as far south as the coastal zone. It is not yet known how many native grasses Benin has, but 70 have been described thus far. The grasses and other forage species are essential for ruminants and play an important role in households that maintain livestock. A prime threat to the natural grassland and other forage species comes from man-made changes to the vegetative cover.

There are a number of select tree species that have good commercial value. The most sought after natural forest timber species (for furniture and other uses) include *Chlorophora excelsa* (iroko), *Afzelia africana* (lingue) and *Pterocarpus erinaceous* (vene). While there are at least 50 other species that can serve the same purpose, the demand for these select few is leading to their local depletion; diversification of species through education campaigns and demonstration would greatly assist in this regard. There are roughly 130 plants and trees that provide fruit, most of them are native. Normally, the local fruits are consumed at the household level and not widely traded. There is however, the potential to expand the commercial production of a number of species.

Agriculture is the most important sector of Benin's economy since 55 percent of the population are engaged in agriculture. It is also the foundation for industrial development. Within the overall agricultural context, the number of native crops that are regionally cultivated is considerable and includes cereals, tubers, and legumes. There are literally thousands of native crop varieties, and the systematic screening of the more productive ones is not carried out nearly enough. As a result, a considerable amount of productivity is lost. Moreover, at this time there is limited capacity within Benin to enhance productivity levels through plant breeding and biotechnology. Benin also contains a considerable number of livestock varieties, the most important of which are the 2 species (taurine and zebu) and 4 races of cattle. Sheep, goats, pigs and poultry all play important roles as well. Overall, livestock contributes about 10% to Benin's GDP. The greatest threat to domestic livestock comes from cross-breeding with introduced races; this is especially true for taurine cattle.

III. USAID Benin

The USAID program in Benin under the previous strategy focused on basic education, family health and governance. Under the new strategy, USAID's program focuses on primary education and family health. The strategic objective for governance is no longer included.

USAID Benin's program did not directly address issued related to biodiversity and natural forest conservation. Until recently, however, select small scale development activities have been financed through NGOs and Peace Corps, some of which may have had an indirect impact on biodiversity and natural forest conservation at the local level (e.g., development projects and micro-enterprise activities designed to increase household productivity and incomes and that offset traditional uses that could be destructive).

Under the previous strategy the education program included an activity with an explicit focus on environmental studies and environment themes were included in textbooks developed for primary schools. The primary education program under the current strategy continues training to equip teachers with skills in teaching core subjects, including French, math, science and technology. The only link between this program and forest and biodiversity conservation is through the Science and Technology Education focus. Within the context of training teachers the importance of biodiversity and forest conservation can be included as part of the overall training package. Beyond that, biodiversity and natural forest conservation threats are not related to the current program design.

The health program under the previous strategy at one time had a micro-project component known at the "Community Environment and Sanitation Health." Activities were not programmed or implemented with biodiversity or forest conservation in mind, but as with the education program, some of the micro-projects may have indirectly addressed some of the threats at the local level. The current health strategy will emphasize the delivery of family services to targeted populations. As currently envisioned, this program will not contain activities that support the conservation of biodiversity or natural forests.

Under the Governance program in the previous strategy USAID Benin has provided the most support to biodiversity and natural forest conservation. This included promoting the production and use of fuel efficient stoves (lower fuelwood demand = less deforestation), alternative agricultural strategies in the cotton growing regions including the promotion of integrated pest management (less land clearing and lower use of pesticides = habitat and biodiversity better conserved), reforestation of depleted cotton fields (habitat development), and agroforestry and tree production (reduces demand on native species). Some of these activities were conducted in the proximity of protected areas. Since the program explicitly focused on improved governance in productive sectors, links to biodiversity and natural forest conservation were not directly monitored.

Throughout the world, successful or promising decentralization programs are usually linked to natural resource access and ownership. Communities can exploit natural resources under eco-tourism or by cultivating and marketing "environmentally friendly" products. The revenues can be important in helping communities become more self-sufficient. Governance programs are not generally explicitly designed to address threats to biodiversity and natural forest conservation. However, if select civil society groups are carefully chosen in relation to their proximity to natural areas, both the capacity of the targeted groups and the conservation of the local resource can be enhanced. Due to resource constraints, the governance strategic objective has been dropped from the new strategy, but USAID/Benin may explore possibilities for collaborating with the USAID West Africa Regional Program and other donors for establishing natural resource activities in transboundary areas.

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